Question: In the past I have seen USPro with Flash settings 2/5/8 and now see settings Flashes 4 / 5 / 8, what do those settings mean and why are they different?

Answer:

As of April 2017 the typical settings are

Flashes 4 / 5 / 8

Frequency (Hz) 5 / 5 / 5

Bursts/Flash 1 / 1 / 2

A Burst is the process that ignites the Xenon gas in the lamp. A Flash is a pulse of already ignited gas. For the USPro for LAV there is one Burst which consists of 4 Flashes. It is difficult for the human eye to visually see the individual flashes, but one can audibly hear a "click" for each flash. In the setting above for LAV the lamp would come on, you would hear 4 clicks and the lamp would go off. In the setting above for SAV the lamp would come on, you would hear 8 clicks and the lamp would go off then the lamp would come on again you would hear 8 clicks and the lamp would go off . Frequency is the rate at which the capacitor charges between the Bursts.

HunterLab believes that due to ROHs the glass composition of the xenon flash tubes has changed which has reduced the UV output of the lamp. To compensate for the reduced UV output and still be able to perform a Ganz Whiteness UV Calibration the number of flashes per burst has been increased for LAV.

If you install a new lamp (XPLM) into an older USPro you may need to increase the number of Flashes for LAV in order to UV calibrate.